



AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the

Application:

1. (Original) A system for performing fluid administration on a patient comprising :

- a single liquid pump (1),

- a liquid distribution system (2) connected to said pump (1) in such a way that liquid can flow from the liquid distribution system (2) to the pump (1) via a pump enter line (56) and vice versa via a pump exit line (57),

- liquid supply means (3) for supplying liquid to a patient (4) via said liquid distribution system (2) and said pump (1),

- a patient conduit (5) adapted for connecting said liquid distribution system (2) to a patient (4),

characterized by the fact that said liquid pump (1) is unidirectional and that said liquid distribution system (2) comprises switching means designed to alternatively connect the pump enter line (56) with the supply means (3) or with the patient conduit (5).

2. (Previously Presented) A system according to claim 1 furthermore comprising a drain line (25), said switching means being also designed to alternatively connect the pump exit line (57) with the drain line (25) or with the patient conduit (5).

3. (Previously Presented) A system according to claim 1 wherein the liquid pump (1) is a peristaltic pump.

4. (Previously Presented) A system according to claim 3 wherein the peristaltic pump is rotatable.

5. (Previously Presented) A system according to claim 1 wherein said liquid distribution system (2) comprises two distinct hub chambers (7,8), the first hub chamber (7) including at least one liquid supply port with dedicated valve means (9), one patient port with dedicated valve means (10) and one pump inlet (26) , the second hub chamber (8) including at least, one patient

port (18) or warmer port (16) with dedicated valve means and one pump outlet (27), said system furthermore comprising control means arranged to close said patient port (10) of the first hub chamber (7) when said liquid supply port (9) is open and vice versa.

6. (Previously Presented) System according to claim 5 wherein said second hub chamber (8) furthermore includes at least one drain port with dedicated valve means (11), said control means being also arranged to close said patient port (18) of the second hub chamber (8) when said drain port (11) is open and vice versa.

7. (Previously Presented) A system according to claim 5 wherein said liquid distribution system (2) only includes two hub chambers (7,8).

8. (Previously Presented) A system according to claim 1 furthermore comprising a warmer system (28), a cavity (17) including a warmer port(19) and a patient port (16), said patient port (18) of the second hub chamber (8) being connected to said warmer port (19) via said warmer system (28).

9-11. (Cancelled).

12. (Previously Presented) A system according to claim 1 wherein said first hub chamber (7) includes several liquid supply ports with respective valve means (9).

13. (Previously Presented) A system according to claim 12 wherein said liquid supply ports (9) are connected to respective liquid supply means having each a different kind of liquid.

14. (Previously Presented) A system according to claim 1 wherein said liquid pump (1) is composed of a tubing and rolling surface on which the tubing is compressed once the cartridge is inserted into a pumping device containing rollers.

15 - 16. (Cancelled).

17. (Previously Presented) A system according to claim 1 wherein said liquid pump (1) and said liquid distribution system (2) are fixed together to form a single cartridge.

18. (Previously Presented) A system according to claim 17 wherein said liquid pump (1) is fixed to said liquid distribution system (2) by vibration attenuation means in order to minimize the vibration on the liquid distribution system (2) when the pump is operating.

19. (Previously Presented) A system according to claim 1 wherein all hub chambers, including said ports and ports, are made within one single part.

20. (Previously Presented) A system according to claim 19 wherein said single part is an injected part of plastic material.

21. (Previously Presented) A system according to claim 1 wherein each hub chamber (7,8) is closed with an upper wall made of a flexible membrane (13), said membrane including valve elements (39) situated above each of said port or port with valve means, said valve elements (39) being designed to close said port or port when the membrane (13) moves downwardly.

22-24. (Cancelled).

25. (Previously Presented) A system according to claim 1 wherein said liquid distribution system includes liquid tight joints arranged in such a manner that they allow a liquid tight connection between said liquid distribution system and a membrane situated on it.

26-34. (Cancelled).

35. (Previously Presented) A system according to claim 1 wherein said liquid distribution system includes an air sensor situated on the patient conduit side.

36. (Previously Presented) A system according to claim 1 comprising a cartridge loading mechanism which allows a tight connection between the membrane and the valves and the liquid distribution system.

37. (Previously Presented) A liquid distribution system (2) for a system performing fluid administration on a patient as defined in claim 1.

38. (Cancelled).

39. (Previously Presented) A system according to claim 1 furthermore comprising a window for detecting correct positioning of the tube.

40-49. (Cancelled).